- 2.10 ILEC shall provide all ingress and egress of fiber and power cabling to MCIm collocated spaces in compliance with MCIm's cable diversity standards. The specific level of diversity required for each site or Network Element will be provided in the collocation request.
- 2.11 ILEC shall ensure protection of MCIm's proprietary customer information. Any collocation arrangement shall include provisions for ILEC protecting MCIm's proprietary information.
- 2.12 ILEC shall participate in and adhere to negotiated service guarantees, and Performance Standards
- 2.13 ILEC shall provide MCIm with written notice five (5) business days prior to those instances where ILEC or its subcontractors may be performing work in the general area of the collocated space occupied by MCIm, or in the general area of the AC and DC power plants which support MCIm equipment. ILEC will inform MCIm by telephone of any emergency related activity that ILEC or its subcontractors may be performing in the general area of the collocated space occupied by MCIm, or in the general area of the AC and DC power plants which support MCIm equipment. Notification of any emergency related activity shall be made immediately prior to the start of the activity so that MCIm can take any action required to monitor or protect its service.
- 2.14 ILEC shall construct the collocated space in compliance with MCIm's collocation request. Any deviation to MCIm's request must be approved.
- 2.15 MCIm and ILEC will complete an acceptance walk through of collocated space requested from ILEC. Exceptions that are noted during this acceptance walk through shall be corrected by ILEC within five (5) days after the walk through. The correction of these exceptions from the original collocation request shall be at ILEC's expense.
- 2.16 ILEC shall provide Telephone drawings depicting the exact location, type, and cable termination requirements (i.e., connector type, number and type of pairs, and naming convention) for ILEC Point of Termination Bay(s) to MCIm within five (5) days of acceptance of MCIm's request for collocated space.
- 2.17 ILEC shall provide detailed drawings depicting the exact path, with dimensions, for MCIm Outside Plant Fiber ingress and egress into MCIm collocated space within five (5) days of the acceptance of MCIm's request for collocated space. Such path and any areas around it in which MCIm must work to perform installation shall be free of friable asbestos, lead paint (unless encapsulated), radon and other health or safety hazards.

- 2.18 ILEC shall provide detailed power cabling connectivity information including the sizes and number of power feeders to MCIm within ten (10) days of the acceptance of MCIm's request for collocated space.
- 2.19 ILEC shall provide positive confirmation to MCIm when construction of MCIm collocated space is 50% completed. This confirmation shall also include confirmation of the scheduled completion and turnover dates.
- 2.20 MCIm shall be compensated by ILEC in accordance with Attachment X for any delays in the negotiated completion and tumover dates which create expenditures or delays to MCIm.
- 2.21 ILEC shall provide the following information to MCIm within five (5) business days of receipt of a written request from MCIm:
  - 2.21.1 Work restriction guidelines.
  - 2.21.2 ILEC or Industry technical publication guidelines that impact the design of ILEC collocated equipment.
  - 2.21.3 ILEC contacts (names and telephone numbers) for the following areas:

Engineering
Physical & Logical Security
Provisioning
Billing
Operations
Site and Building Managers
Environmental and Safety

- 2.21.4 Escalation process for the ILEC employees (names, telephone numbers and the escalation order) for any disputes or problems that might arise pursuant to MCIm's collocation.
- 2.22 Power as referenced in this document refers to any electrical power source supplied by ILEC for MCIm equipment. It includes all superstructure, infrastructure, and overhead facilities, including, but not limited to, cable, cable racks and bus bars. ILEC will supply power to support MCIm equipment at equipment specific DC and AC voltages. At a minimum, ILEC shall supply power to MCIm at parity with that provided by ILEC to itself or to any third party. If ILEC performance, availability, or restoration falls below industry standards, ILEC shall bring itself into compliance with such industry standards as soon as technologically feasible.

- 2.22.1 Central office power supplied by ILEC into the MCIm equipment area, shall be supplied in the form of power feeders (cables) on cable racking into the designated MCIm equipment area. The power feeders (cables) shall efficiently and economically support the requested quantity and capacity of MCIm equipment. The termination location shall be as requested by MCIm.
- 2.22.2 ILEC shall provide power as requested by MCIm to meet MCIm's need for placement of equipment, interconnection, or provision of service.
- 2.22.3 ILEC power equipment supporting MCIm's equipment shall:
  - 2.22.3.1 Comply with applicable industry standards (e.g., Bellcore, NEBS and IEEE) or manufacturer's equipment power requirement specifications for equipment installation, cabling practices, and physical equipment layout;
  - 2.22.3.2 Have redundant power feeds with physical diversity and battery back-up as required by the equipment manufacturer's specifications for MCIm equipment, or, at minimum, at parity with that provided for similar ILEC equipment;
  - 2.22.3.3 Provide, upon MCIm's request, the capability for real time access to performance monitoring and alarm data that impacts (or potentially may impact) MCIm traffic;
  - 2.22.3.4 Provide central office ground, connected to a ground electrode located within the MCIm collocated space, at a level above the top of MCIm equipment plus or minus 2 feet to the left or right of MCIm's final request; and
  - 2.22.3.5 Provide feeder capacity and quantity to support the ultimate equipment layout for MCIm equipment in accordance with MCIm's collocation request.
  - 2.22.3.6 ILEC shall, within ten (10) days of MClm's request:
    - 2.22.3.6.1 Provide documentation submitted to and received from contractors for any contractor bids for any work being done on behalf of MCIm (this includes, but is not limited to, power supplies, and cage construction);

- 2.22.3.6.2 Provide an installation sequence and access that will allow installation efforts in parallel without jeopardizing personnel safety or existing MCIm services;
- 2.22.3.6.3 Provide power plant alarms that adhere to Bell Communication Research (Bellcore). Network Equipment-Building System (NEBS) standards TR-EOP-000063;
- 2.22.3.6.4 Provide cabling that adheres to Bell Communication Research (Bellcore) Network Equipment-Building System (NEBS) standards TR-EOP-000063;
- 2.22.3.6.5 Provide Lock Out-Tag Out and other electrical safety procedures and devices in conformance with the most stringent of OSHA or industry guidelines.
- 2.22.4 ILEC will provide MCIm with written notification within ten (10) business days of any scheduled AC or DC power work or related activity in the collocated facility that will or might cause an outage or any type of power disruption to MCIm equipment located in ILEC facility. ILEC shall provide MCIm immediate notification by telephone of any emergency power activity that would impact MCIm equipment.
- 2.23 ILEC shall be required to expand its facilities or obtain additional space to make the necessary collocation space available pursuant to requests made under this Attachment.
- 2.24 Intervals for physical collocation shall be a maximum of three months from the requested date. Virtual collocations will have a maximum interval of 2 months.
- 2.25 MCIm shall be allowed to install equipment of its choice provided that it meets Bellcore specifications and is an ILEC approved vendor. Approved vendors will, at minimum, be vendors the ILEC currently approves for their own use. ILEC will approve additional vendors provided they meet Bellcore standards.
- 2.26 MCIm may choose to lease unbundled transport from the ILEC, or from a third carrier, rather than construct to the ILED facility where equipment will be collocated.

2.27 ILEC will maintain MCIm's virtually collocated equipment in a manner equal to, or better than, how it maintains its own equipment. Maintenance includes the change out of electronic cards provided by MCIm and per MCIm's request.

#### Section 3. License

ILEC shall grant MCIm a license to occupy any premises or rack space which contain collocated equipment for the Term of the Agreement.

#### Section 4. Technical References

ILEC shall provide collocation in accordance with the following standards:

- 4.1 Institute of Electrical and Electronics Engineers (IEEE) Standard 383, IEEE Standard for Type Test of Class 1 E Electric Cables, Field Splices, and Connections for Nuclear Power Generating Stations.
- 4.2 National Electrical Code (NEC) use latest issue.
- 4.3 TA-NPL-000286, NEBS Generic Engineering Requirements for System Assembly and Cable Distribution, Issue 2, (Bellcore, January 1989).
- 4.4 TR-EOP-000063 Network Equipment-Building System (NEBS) Generic Equipment Requirements, Issue 3, March 1988.
- 4.5 TR-EOP-000151, Generic Requirements for 24-, 48-, 130-, and 140-Volt Central Office Power Plant Rectifiers, Issue 1, (Bellcore, May 1985).
- 4.6 TR-EOP-000232, Generic Requirements for Lead-Acid Storage Batteries, Issue 1 (Belicore, June 1985).
- 4.7 TR-NWT-000154, Generic Requirements for 24-, 48-, 130, and 140-Volt Central Office Power Plant Control and Distribution Equipment, Issue 2, (Bellcore, January 1992).
- 4.8 TR-NWT-000295, Isolated Ground Planes: Definition and Application to Telephone Central Offices, Issue 2, (Bellcore, July 1992).
- 4.9 TR-NWT-000840, Supplier Support Generic Requirements (SSGR), (A Module of LSSGR, FR-NWT-000064), Issue 1, (Belicore, December 1991).

- 4.10 TR-NWT-001275 Central Office Environment Installations/Removal Generic Requirements, Issue 1, January 1993.
- 4.11 Underwriters' Laboratories Standard, UL 94.

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## ATTACHMENT VI

# Rights of Way (ROW), Conduits, Pole Attachments

## Section 1. Introduction

This attachment sets forth the requirements for Rights of Way, Conduits and Pole Attachments.

## Section 2. Definitions

2.1 "Poles, ducts, conduits and ROW" refer to all the physical facilities and legal rights which provide for access to pathways across public and private property. These include poles, pole attachments, ducts, innerducts, conduits, building entrance facilities, building entrance links, equipment rooms, remote terminals, cable vaults, telephone closets, building risers, rights of way, or any other requirements needed to create pathways. These pathways may run over, under, across or through streets, traverse private property, or enter multi-unit buildings. A Right of Way ("ROW") is the right to use the land or other property owned, leased, or controlled by any means by ILEC to place Poles, ducts, conduits and ROW or to provide passage to access such Poles, ducts, conduits and ROW. A ROW may run under, on, or above public or private property (including air space above public or private property) and shall include the right to use discrete space in buildings, building complexes, or other locations.

## Section 3. Requirements

- 3.1 ILEC shall make Poles, duct, conduits and ROW available to MCIm upon receipt of a request for use within the time periods provided in this Attachment VI, providing all information necessary to implement such a use and containing rates, terms and conditions, including, but not limited to, maintenance and use in accordance with this Agreement and at least equal to those which it affords itself, its Affiliates and others. Other users of these facilities, including ILEC, shall not interfere with the availability or use of the facilities by MCIm.
- 3.2 Within 24 hours of MCIm's request for any Poles, ducts, conduits, or ROW, ILEC shall provide any information in its possession or available to it regarding the environmental conditions of the Poles, ducts, conduits or ROW route or location including, but not limited to, the existence and condition of asbestos, lead paint, hazardous substance contamination, or

radon. Information is considered "available" under this Agreement it is in ILEC's possession, or the possession of a current or former agent, contractor, employee, lessor, or tenant of ILEC's. If the Poles, ducts, conduits or ROW contain such environmental contamination, making the placement of equipment hazardous, ILEC shall offer alternative Poles, ducts, conduits or ROW for MCIm's consideration. ILEC shall complete an Environmental, Health and Safety Questionnaire for each work location MCIm requests or ILEC suggests as a site to be covered under this Agreement. ILEC shall return the completed questionnaire to MCIm within ten (10) days and shall allow MCIm to perform any environmental site investigations, including, but not limited to, Phase I and Phase II environmental site assessments, as MCIm may deem to be necessary.

- 3.3 ILEC shall not prevent or delay any third party assignment of ROW to MCIm.
- 3.4 ILEC shall offer the use of such Poles, ducts, conduits and ROW it has obtained from a third party to MCIm, to the extent such agreement does not prohibit ILEC from granting such rights to MCIm. They shall be offered to MCIm on the same terms as are offered to ILEC.
- 3.5 ILEC shall provide MCIm equal and non-discriminatory access to Poles, ducts, conduit and ROW and any other pathways on terms and conditions equal to that provided by ILEC to itself or to any other party. Further, ILEC shall not preclude or delay allocation of these facilities to MCIm because of the potential needs of itself or of other parties, except a maintenance spare may be retained as described below.
- 3.6 ILEC shall not attach, or permit other entities to attach facilities on, within or overlashed to existing MCIm facilities without MCIm's prior written consent.
- 3.7 ILEC agrees to produce current detailed engineering and other plant records and drawings of Poles, ducts, conduit and ROW, as well as cost data, within a reasonable time frame, which in no case shall exceed two (2) business days following MCIm's request for access to such engineering, cost data and other plant records and drawings of additional Poles, ducts, conduits and ROW in selected areas as specified by MCIm. Such information shall be of equal type and quality as that of ILEC's own engineering and operations staff. ILEC shall also allow personnel designated by MCIm to examine such engineering records and drawings at ILEC Central Offices and ILEC Engineering Offices upon two (2) days notice to ILEC.
- 3.8 ILEC shall provide to MCIm a Single Point of Contact for negotiating all structure lease and ROW agreements.

- 3.9 ILEC shall provide information regarding the availability and condition of Poles, ducts, conduit and ROW within twenty (20) business days of MCIm's request for use of Poles, ducts, conduits and ROW ("Request") regardless of whether the information then exists in ILEC's records or if ILEC must physically examine the ROW, conduit or pole attachments. MCIm shall have the option to be present at the field based survey and ILEC shall provide MCIm at least twenty-four (24) hours notice prior to the start of such field survey. During and after this period, ILEC shall allow MCIm personnel to enter manholes and equipment spaces and view pole structures to inspect such structures in order to confirm usability or assess the condition of the structure. ILEC shall send MCIm a written notice confirming availability pursuant to the Request within such 20 day period ("Confirmation").
- 3.10 For the period beginning at the time of the Request and ending ninety (90) days following Confirmation, ILEC shall reserve such Poles, ducts, conduit and ROW for MCIm and shall not allow any use thereof by any party, including ILEC. MCIm shall elect whether or not to accept such Poles, ducts, conduit and ROW within such 90 day period. MCIm may accept such facilities by sending written notice to ILEC ("Acceptance").
- 3.11 After Acceptance by MCIm, MCIm shall have six (6) months to begin attachment and/or installation of its facilities to the Poles, ducts, conduit and ROW or request ILEC to begin make ready or other construction activities. Any such construction, installation or make ready shall be completed by the end of one (1) year after Acceptance. MCim shall not be in default of the 6 month or 1 year requirement above if such default is caused in any way by any action, inaction or delay on the part of ILEC or its affiliates or subsidiaries. After Acceptance, ILEC shall complete any work required to be performed by ILEC or any ILEC work requested by MCIm within 30 days of such time the work is required or within 30 days of the time such work is requested by MClm, whichever time is earlier. MCIm shall begin payment for the use of the Poles, ducts, conduit and ROW upon the earlier of: 1) completion of construction and installation of the facilities and confirmation by appropriate testing methods to be in a condition ready to operate in MCIm's network or 2) 6 months after Acceptance.
- 3.12 ILEC shall relocate and/or make ready existing Poles, ducts, conduit and ROW where necessary and feasible to provide space for MCIm's requirements. Subject to the requirements above, the parties shall endeavor to mutually agree upon the time frame for the completion of such work within five (5) days following MCIm's requests of this work; however, any such work required to be performed by ILEC shall be completed with 30 days, unless otherwise agreed by MCIm in writing.

- 3.13 MCIm may, at its option, install its facilities on Poles, ducts, conduit and ROW and use MCIm or MCIm designated personnel to attach its equipment to such ILEC Poles, ducts, conduits and ROW.
- 3.14 ILEC shall provide MCIm space in manholes for racking and storage of cable and other materials as requested by MCIm.
- 3.15 ILEC shall remove any retired cable from conduit systems or poles to allow for the efficient use of conduit space and pole space. ILEC must expand its facilities, including placement of taller poles or additional conduits, if necessary, to accommodate MCIm's request.
- 3.16 Where ILEC has spare innerducts which are not, at that time, being used for providing its services, ILEC shall offer such ducts for MCIm's use. ILEC shall not reserve more than one inner duct in any conduit cross section for emergency purposes. Any other spare innerduct or conduit shall be available for use by MCIm. Where only two inner ducts remain available (including an emergency spare), ILEC shall offer MCIm the use of at least one innerduct.
- 3.17 Where a spare inner duct does not exist, ILEC shall allow MCIm to install an inner duct in ILEC conduit.
- 3.18 Where ILEC has any ownership or other rights to ROW to buildings or building complexes, or within buildings or building complexes, ILEC shall offer to MCIm:
  - 3.18.1 The right to use any spare metallic and fiber optic cabling within the building or building complex;
  - 3.18.2 The right to use any spare metallic and fiber optic cable from the property boundary into the building or building complex:
  - 3.18.3 The right to use any available space owned or controlled by ILEC in the building or building complex to install MCIm equipment and facilities:
  - 3.18.4 Ingress and egress to such space; and
  - 3.18.5 The right to use electrical power at parity with ILEC's rights to such power.
- 3.19 Whenever ILEC intends to modify or alter any Poles, ducts, conduits or ROW which contains MCIm's facilities, ILEC shall provide

reasonable opportunity to add to or modify MCIm's facilities. If MCIm adds to or modifies MCIm's facilities according to this paragraph, MCIm shall bear a proportionate share of the costs incurred by ILEC in making such facilities accessible.

3.20 MCIm shall not be required to bear any of the costs of rearranging or replacing its facilities, if such rearrangement or replacement is required as a result of an additional attachment or the modification of an existing attachment sought by any entity other than MCIm, including ILEC.

3.21 ILEC shall maintain the Poles, ducts, conduits and ROW at its sole cost. MCIm shall maintain its own facilities installed within the Poles, ducts, conduits and ROW at its sole cost. In the event of an emergency, ILEC shall begin repair of its facilities containing MCIm's facilities within two (2) hours of notification by MCIm. If ILEC cannot begin repair within such 2 hour period, MCIm may begin such repairs without the presence of ILEC personnel. MCIm may climb poles and enter the manholes, handholes, conduits and equipment spaces containing ILEC's facilities in order to perform such emergency maintenance, but only until such time as qualified personnel of ILEC arrives ready to continue such repairs. For both emergency and non-emergency repairs, MCIm may use spare innerduct or conduits, including the innerduct or conduit designated by ILEC as emergency spare for maintenance purposes; however, MCIm may only use such spare conduit or innerduct for a maximum period of 90 days.

3.22 In the event of a relocation necessitated by a governmental entity exercising the power of eminent domain, when such relocation is not reimbursable, ILEC shall be solely responsible for all costs of relocation of the Poles, ducts, conduits and ROW and MCIm shall pay only the costs of any new MCIm facilities and the costs of installation of the facilities in the newly rebuilt ILEC Poles, ducts, conduits and ROW.

#### Section 4. Unused Transmission Media

#### 4.1 Definitions:

- 4.1.1 Unused Transmission Media transmission facilities (e.g., optical fiber, copper twisted pairs, coaxial cable) which have no lightwave or electronic transmission equipment.
- 4.1.2 Dark Fiber, one type of unused transmission media, is unused strands of optical fiber. Dark Fiber also includes strands of optical fiber which may or may not have lightwave repeater (regenerator or optical amplifier) equipment interspliced, but which has no line terminating facilities terminated to such strands. Dark

Fiber also means unused wavelengths within a fiber strand for purposes of coarse or dense wavelength division multiplexed (WDM) applications. Typical single wavelength transmission involves propagation of optical signals at single wavelengths (1.3 or 1.55 micron wavelengths). In WDM applications, a WDM device is used to combine optical signals at different wavelengths on to a single fiber strand. The combined signal is then transported over the fiber strand. For coarse WDM applications, one signal each at 1.3 micron and 1.55 micron wavelength are combined. For dense WDM applications, many signals in the vicinity of 1.3 micron wavelength and/or 1.55 micron wavelength are combined. Spare wavelengths on a fiber strand (for coarse or dense WDM) are considered Dark Fiber.

## 4.2 Requirements

- 4.2.1 ILEC shall make available Unused Transmission Media to MCIm under an Indefeasible Right of Use or license agreement on terms at least equal to those which it affords itself and its affiliates, subsidiaries and others.
- 4.2.2 ILEC shall provide a Single Point of Contact (SPOC) for negotiating all Unused Transmission Media lease agreements.
- 4.2.3 MCIm may test the quality of the Unused Transmission Media to confirm its usability and performance specifications.
- 4.2.4 ILEC shall provide to MCIm information regarding the location, availability and performance of Unused Transmission Media within five (5) business days for a records based answer and ten (10) business days for a field based answer, after receiving a request from MCIm ("Request"). Within such time period, ILEC shall send written confirmation of availability of the Unused Transmission Media ("Confirmation"). From the time of the Request to 90 days after Confirmation, ILEC shall reserve such requested Unused Transmission Media for MCIm's use and may not allow any other party to use such media, including ILEC.
- 4.2.5 ILEC shall make Unused Transmission Media available for MCIm's use within twenty (20) business days after it receives written acceptance from MCIm that the Unused Transmission Media previously reserved by ILEC is wanted for use by MCIm. This includes identification of appropriate connection points (e.g., Light Guide Interconnection (LGX) or splice points) to enable MCIm to connect or splice MCIm provided transmission media (e.g., optical fiber) or equipment to the Unused Transmission Media.

- 4.2.6 ILEC shall be required to expand or overbuild its network and capacity to accommodate requests under this Attachment
- 4.3 Requirements Specific to Dark Fiber
- 4.3.1 MCIm may splice and test Dark Fiber leased from ILEC using MCIm or MCIm designated personnel. ILEC shall provide appropriate interfaces to allow splicing and testing of Dark Fiber. ILEC shall provide an excess cable length of 25 feet minimum (for fiber in underground conduit) to allow the uncoiled fiber to reach from the manhole to a splicing van.
- 4.3.2 For WDM applications, ILEC shall provide to MCIm an interface to an existing WDM device or allow MCIm to install its own WDM device (where sufficient system loss margins exist or where MCIm provides the necessary loss compensation) to multiplex the traffic at different wavelengths. This applies to both the transmit and receive ends of the Dark Fiber.

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## **ATTACHMENT VII**

## NUMBER PORTABILITY

## Section 1. ILEC Provision of Number Portability

ILEC shall provide number portability in accordance with requirements of the Act and FCC Rules and Regulations. Currently available number portability (INP) shall be provided by ILEC to MCIm in accordance with FCC Rules and Regulations. INP shall be provided with minimum impairment of functionality, quality, reliability and convenience to subscribers of MCIm services. ILEC shall provide number portability in conformance with FCC Rules and Regulations and the Act.

## Section 2. Interim Number Portability (INP)

INP shall be provided by Remote Call Forwarding ("RCF") or Direct Inward Dialing (DID) on Route Indexing (RI). In providing RCF ILEC agrees to provide Route Indexing and LERG reassignment in every local service office. MCIm shall specify on a per telephone number basis which method of INP is to be employed and ILEC shall provide such method to the extent technically feasible.

- 2.1 Remote Call Forwarding: Remote Call Forwarding (RCF) is an INP method to provide subscribers with service-provider portability by redirecting calls within the telephone network. When RCF is used to provide interim number portability, calls to the ported number will first route to the ILEC switch to which the ported number was previously assigned. The ILEC switch will then forward the call to a number associated with the MCIm designated switch to which the number is ported. MCIm shall not be required to order any additional paths to handle multiple simultaneous calls to the same ported telephone number.
- 2.2 DID is an INP method that makes use of direct inward dialing trunks. Each DID trunk group used for INP is dedicated to carrying FLEX-DID INP traffic between the ILEC end office and the MCIm switch. Traffic on these trunks cannot overflow to other trunks, so the number of trunks shall be conservatively engineered by ILEC. Also, inter-switch signaling is usually limited to multi-frequency (MF). This precludes passing CLID to the MCIm switch.
- 2.3 Route Indexing: Route Indexing may take two forms: Route Index-Portability Hub (RI-PH) or Directory Number-Route Index (DN-RI).

2.3.1 RI-PH will route a dialed call to the ILEC switch associated with the NXX of the dialed number. The ILEC switch shall then insert a prefix onto the dialed number which identifies how the call is to be routed to MCIm. The prefixed dialed number is transmitted to the ILEC tandem switch to which MCIm is connected.

The prefix is removed by the operation of the tandem switch and the dialed number is routed to MCIm's switch so the routing of the call can be completed by MCIm.

- 2.3.2 ON-RI is a form of RI-PH that requires direct trunking between the ILEC switch to which the ported number was originally assigned and the MCIm switch to which the number has been ported. The ILEC switch shall send the originally dialed number to the MCIm switch without a prefix.
- 2.3.3 ILEC shall provide RI-PH or ON-RI on an individual telephone number basis, as designated by MCIm. Where technically feasible, MCIm may designate both methods so that calls to ported numbers are first directed to the MCIm switch over direct trunks but may overflow to tandem trunks if all trunks in the direct group are occupied.
- 2.3.4 For both RI-PH and ON-RI the trunks used may, at MCIm's option, be the same as those used for exchange of other local traffic and toll traffic with ILEC. At MCIm's option, the trunks shall employ SS7 or in band signaling and may be one way or two way.
- 2.4 LERG Reassignment: Portability for an entire NXX or thousands block (NXX-X) of numbers shall be provided by utilizing reassignment of the block to MCIm through the Local Exchange Routing Guide (LERG). Updates to translations in the ILEC switching office from which the telephone number is ported will be made by the ILEC prior to the date on which LERG changes become effective, in order to redirect calls to the MCIm switch via route indexing.
- 2.5 Other Currently Available Number Portability Provisions:
  - 2.5.1 ILEC shall exchange with MCIm, SS7 TCAP messages as required for the implementation of Custom Local Area Signaling Services (CLASS) or other features available in the ILEC network.
  - 2.5.2 ILEC shall disclose to MCIm any technical or capacity limitations that would prevent use of a requested INP in a particular switching office. ILEC and MCIm shall cooperate in the process of

- including updating switch translations where necessary within five (5) minutes after notification that physical cut-over has been completed (or initiated), as MCIm may designate.
- 2.5.3 For INP, MCIm shall have the right to use the existing ILEC 911 infrastructure for all 911 capabilities. When RCF is used for MCIm subscribers, both the ported numbers and shadow numbers shall be stored in PSAP databases. MCIm shall have the right to verify the accuracy of the information in the PSAP databases.
- 2.5.4 When RCF is used to port a subscriber, the donor provider must maintain the Line Information Database (LIDB) record for that number to reflect appropriate conditions as reported to it by the porting service provider. The donor must outclear call records to MCIm for billing and collection from the subscriber. MCIm shall receive revenue for LIDB look-ups.
- 2.5.5 LEC should send a CARE transaction 2231 to notify IXC that access is now provided by a new CLEC for that number.

## Section 3. Number Portability (NP)

- 3.1.1 The requirements for NP shall include the following:
- 3.1.2 Subscribers must be able to change local service providers and retain the same telephone number(s) consistent with FCC rules and regulations.
- 3.1.3 The NP network architecture shall not subject alternate local exchange carriers to any degradation of service compared to ILEC in any relevant measure, including transmission quality, switching and transport costs, increased call set-up time and post-dial delay, and MCIm shall not be required to rely on the ILEC network for calls completing to its ported customers.
- 3.1.4 When an office is equipped with NP, all NXXs in the office shall be defined as portable and translations will be changed in all service provider switches to open those NXXs for database queries. If a switch serves multiple rate centers, then at a minimum, all of the NXXs for a rate center in that switch shall be made portable when any one of them is turned up.
- 3.1.5 When an NXX is defined as portable, it shall also be defined as portable in all LRN-capable offices which have direct trunks to the given switch.

- 3.1.6 Upon introduction of LRN in a market area, the tandems (local and access) shall be among the first converted, with no unreasonable delay. All portable NXXs shall be recognized in these tandems as portable, with queries launched from these switches.
- 3.1.7 Upon introduction of LRN in a market area, the switches that provide dial tone to Public Service Answering Point (PSAP) call centers shall be among the first converted and opened for LRN to allow queries to be launched from these switches. There shall be no unreasonable delay in these conversions.
- 3.1.8 When a subscriber ports to another service provider, the donor provider shall use information provided by the porting provider to update the 911 tandem switch routing tables and 911/ALI database to correctly route, and provide accurate information to Public Service Answering Point (PSAP) call centers.
- 3.1.9 When a subscriber ports to another service provider and has previously secured a reservation of line numbers from the donor provider for possible activation at some future point, these reserved but inactive numbers shall "port" along with the active numbers being ported by the subscriber in order to ensure that the end user subscriber will be permitted to expand its service using the same number range it could use if it remained with the donor provider.
- 3.1.10 During the process of porting a subscriber, the donor service provider shall implement the 10-Digit trigger feature. When the donor provider receives the porting request, the 10-Digit trigger shall be applied to the Subscriber's line at least 24 hours prior to the order due date in order to overcome donor network time delays in the disconnection of the subscriber. Alternatively, when an activation notice is sent to an NPAC to trigger a broadcast to service provider databases, the donor switch shall have its translations changed to disconnect the subscriber's line within fifteen (15) minutes of the donor network Local SMS's having received the broadcast.

## 3.2 Joint Cooperation

Both MCIm and ILEC shall:

Support all emergency and operator services.

Use scarce numbering resources efficiently and administer such resources in a competitively neutral manner.

Jointly cooperate with each other to ensure that both carriers shall be able to rate and bill all types of calls.

Jointly cooperate with each other to apply NP consistently on a nationwide basis, and in accordance with all Federal Communication Commission directives.

3.3 Location Routing Number (LRN)

ILEC and MCIm shall work to implement the LRN-NP solution.

- 3.3.1 A ten-digit code, consistent with the North American Numbering Plan, called the location routing number (LRN) shall be used as a network address for each switch that terminates subscriber lines, i.e. an end office. LRN shall support existing six-digit routing and may be implemented without changes to existing switch routing algorithms. In existing end offices, the LRN shall be selected from one of its existing NPA-NXXs. New end offices shall be assigned LRNs through normal administrative processes.
- 3.3.2 LRN employs an "N-1" Query Strategy for interLATA or intraLATA toll calls, by which the originating carrier will pass the call to the appropriate toll carrier who will perform a query to an external routing database and efficiently route the call to the appropriate terminating local carrier either directly or through an access tandem office. For a local call to a ported number, the originating carrier is the "N-1" carrier. It will perform an external database query and pass the call to the appropriate terminating carrier. The "N-1" methodology will be used to extend portability on a phased, region-by-region basis and it does not place ILEC or other carriers needlessly in the call path.
- 3.3.3 ILEC shall furnish MCIm with the first six digits of the originating LRN when it supplies MCIm with the Jurisdiction Information Parameter for the Initial Address Message.
- 3.3.4 ILEC agrees to begin the introduction of LRN to end user subscribers who may begin changing local service providers and retaining their existing telephone number based on the time line set out by the FCC in its Telephone Number Portability Order (CC Docket No. 95-116), or as per a State order if such time for introduction of LRN set by the State is earlier than would result under the FCC Order.
- 3.3.5 The generic requirements for LRN are specified in the following publications: Generic Switching and Signaling

Requirements for Number Portability, Issue 1.00, February 12, 1996 [Editor - Lucent Technologies, Inc.]; Generic Requirements for SCP Application and GTT Function for Number Portability, Issue 0.31, Final Draft—March 24, 1996 [Editor - Ameritech Inc.]; and Generic Operator Services Switching Requirements for Number Portability, Issue 1.00, Final Draft, April 12, 1996 [Editor - Nortel].

## 3.4 Additional NP Requirements

- 3.4.1 For local calls to a portable NXX, ILEC shall query an external database as soon as the call reaches the first NP-capable switch in the call path. An LRN-capable originating switch shall query on a local call to a portable NXX as soon as it determines that it (the originating switch) does not serve the dialed number.
- 3.4.2 ILEC shall be the default carrier for database queries where a participating carrier is unable to perform its own query due to abnormal conditions.
- 3.4.3 ILEC will provide MCIm INP and NP for subscribers moving to a different location, or staying at the same location, within the same rate center area.

## 3.5 SMS Administration

ILEC will work cooperatively with other local service providers to establish the NP Service Management System (SMS). The SMS shall be administered by a neutral third party, to provide for the efficient porting of numbers between carriers. There must be one exclusive NPAC per portability State or region, and ILEC shall provide all information uploads and downloads regarding ported numbers to/from, respectively, the exclusive NPAC. ILEC and MCIm shall cooperate to facilitate the expeditious deployment of LRN-based NP through the process prescribed by the FCC, including, but not limited to, participation in the selection of a neutral third party and development of SMS, as well as SMS testing for effective procedures, electronic system interfaces, and overall readiness for use consistent with that specified for Provisioning in this Agreement.

## Section 4. Requirements for INP and NP

### 4.1 White and Yellow Page Listings

LEC shall provide and maintain for MCIm one (1) white page and one (1) yellow page (if applicable) listing for each MCIm subscriber that has ported its number from ILEC, consistent with that specified for Provisioning in this Agreement. The listing and handling of listed and nonlisted telephone numbers will be at least at parity with that provided by ILEC to its own subscribers.

#### 4.2 Cut-Over Process

ILEC shall cooperate in the process of porting numbers from one carrier to another so as to limit service outage for the ported subscriber. This shall include, but not be limited to, updating its network element translations within five (5) minutes following notification by the industry SMS, or ported-to local service provider, and deploying such temporary translations as may be required to minimize service outage, e.g., unconditional triggers. Also, MCIm shall have the right to determine who initiates the order for INP in specific cut-over situations.

## 4.3 Testing

ILEC and MCIm shall cooperate in conducting MCIm's testing to ensure interconnectivity between systems. ILEC shall inform MCIm of any system updates that may affect the MCIm network and ILEC shall, at MCIm's request, perform tests to validate the operation of the network. Additional testing requirements may apply as specified by this Agreement.

## 4.4 Engineering and Maintenance

ILEC and MCIm will cooperate to ensure that performance of trunking and signaling capacity is engineered and managed at levels which are at least at parity with that provided by ILEC to its subscribers and to ensure effective maintenance testing through activities such as routine testing practices, network trouble isolation processes and review of operational elements for translations, routing and network fault isolation.

Additional specific engineering and maintenance requirements shall apply as specified in this Agreement.

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## 4.5 Recording and Billing

ILEC shall provide MCIm with accurate billing and Customer Account Record Exchange data for MCIm subscribers whose numbers have been ported.

- 4.5.1 Calls originated from RCF ported numbers in ILEC endoffices and sent to the M@Im interLATA toll network must signal the shadow number in the Calling Party Number (CgPN) parameter and ported number in the Charge Number (CN) parameter in the SS7 Initial Address Message.
- 4.5.2 ILEC shall provide MCIm call detail records identified each IXC which are sufficient to allow MCIm to render bills to IXCs for calls IXCs place to ported numbers in the ILEC network which the ILEC forwards to MCIm for termination.
- 4.6 Operator Services and Directory Assistance

With respect to operator services and directory assistance associated with NP for MCIm subscribers, ILEC shall provide the following:

- 4.6.1 While INP is deployed and prior to conversion to NP:
  - 4.6.1.1 If requested by MCIm, ILEC shall provide Emergency Interrupt (EI) trunks to the MCIm End Office for Busy Line Verification/Busy Line Identification call requests for lines that terminate at the MCIm End Office.
  - 4.6.1.2 When a BLV/BLI request for a ported number is directed to a ILEC operator and the query is not successful (i.e., the request yields an abnormal result), the operator shall confirm whether the number has been ported and shall direct the request to the appropriate operator.
  - 4.6.1.3 ILEC shall allow MCIm to order provisioning of Telephone Line Number (TLN) calling cards and Billed Number Screening (BNS), in its LIDB, for ported numbers, as specified by MCIm. ILEC shall continue to allow MCIm access to its LIDB. Other LIDB provisions are specified in this Agreement.
  - 4.6.1.4 Where ILEC has control of directory listings for NXX codes containing ported numbers, ILEC shall maintain entries for ported numbers as specified by MClm.

- 4.6.2 When NP is in place:
  - 4.6.2.1 The Provisions in 4.6.1.1~.4.6.1.5 preceding, shall apply when NP is in place.
  - 4.6.2.2 If Integrated Services Digital Network User Part (ISUP) signaling is used ILEC shall provide the Jurisdiction Information Parameter in the SS7 Initial Address Message. (See Generic Switching and Signaling Requirements for Number Portability, Issue 1.0, February 12.1996 (Editor Lucent Technologies, Inc.])
  - 4.6.2.3 ILEC shall provide a 10-Digit Global Title Translation (GTT) Node for routing queries for TCAP-based operator services (e.g., LIDB).
- 4.6.2.4 ILEC OSS shall meet all requirements specified in "Generic Operator Services Switching Requirements for Number Portability," Issue 1.00, Final Draft, April 12, 1996.

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